Vuorinen et al Serial No. To be Assigned

- (b) bleaching the chemical cellulose pulp from step (a) in at least one bleaching stage with chlorine, chloride dioxide, ozone, or peracid.
- 30. A method of treating and bleaching chemical cellulose pulp produced by alkaline delignification and having a kappa number under 24, having hexenuronic acid therein, comprising the steps of:
- (a) treating chemical cellulose pulp produced by alkaline delignification having a kappa number under 24 and at a solids consistency between 0.1-50% by treating the pulp at a temperature over 85°C and at a pH between about 2-5 for sufficient time to remove at least about 50% of the hexenuronic acid and to decrease the kappa number of the pulp by at least 2 units;
 - (b) treating the pulp with a chelating agent; and
 - (c) bleaching the pulp in at least one bleaching stage with peroxide.
- 31. A method of treating and bleaching chemical cellulose pulp produced by alkaline delignification and having a kappa number under 24, having hexenuronic acid therein, comprising the steps of:
- (a) treating chemical cellulose pulp produced by alkaline delignification having a kappa number under 24 and at a solids consistency between 0.1-50% by treating the pulp at a temperature over 85° C and at a pH between about 2-5 for at least a time t, where t = 0.5 exp (10517/(T+273) -24) to remove at least bout 50% of the hexenuronic acid and to decrease the kappa number of the pulp by at least 2 units; and